3. NOTES ON THE COMMON PALM CIVET OR TODDY CAT PARADOXURUS HERMAPHRODITUS (PALLAS), WITH SPECIAL REFERENCE TO THE AGE AT SHEDDING OF THE MILK TEETH

(With two plates)

On 12-viii-1965 a female kitten of *Paradoxurus hermaphroditus* (Pallas) was given to us by members of the priestly community in charge of the great temple here, Lingaraj or Bhubaneswar, in the compound of which they informed us that they had captured her on the previous day.

This kitten (Plate I, above) was completely weaned when received and was able to eat raw meat quickly and deftly. She has not become tame, perhaps because she was too old when captured. In 1966, thanks to Mr. Ghanashyam Naik, the Superintendent of the Nandan Kanan Biological Park near Bhubaneswar, we have examined young animals who were seen by him on recorded dates before their eyes were open. These comparisons make certain that our own animal, here discussed, was born not later than May 1965, and most probably during the previous February.

Examination of these Nandan Kanan kittens has also enabled us to confirm Pallas' original description of the male genitalia published in 1777 by Schreber in Vol. III of his SÄUGETHIERE. We are grateful to Professor Ernst Mayr for the following translation of this from the German.

'Above the penis extends a longish bare area toward the anus, the tender and white skin of which, below, where it begins, forms a double fold with an intervening cleft [Scheidung].

'This is the reason why uninformed people have been shown this animal as a hermaphrodite.'

In a six months' old individual the penis is actually in this bare area enclosed by the two folds and the testes have not descended into an external scrotum. The form and position of the vulva of our now adult female is unexceptional when compared with those of dogs and cats, though both orifices are horizontal and ventral when at rest.

After various experiments she is now fed on fruit, chiefly bananas, which are necessary to keep her stools firm. The divergence of the nostrils and the vertical cleft down the centre of the rhinarium of this civet parallel the nose structure of another banana eater, the fruit bat *Cynopterus sphinx* (Vahl). She also receives daily one raw egg and a helping of flesh, either mammal, fish, prawns or snails, supplemented by insects and the small vertebrates that our dog maims or kills, but does not eat herself. The only mammalian butcher's meats the civet will now accept

are raw goat's liver, and various preparations of cooked and salted pork. She accepts cakes and sweets, but not their raw materials such as gur or chopped coconut. Care has to be taken to vary what is offered to her, as she is the first non-human animal known to us who shows the human corruption of alternating periods of greed for a food substance, with periods of refusal to accept it.

She breaks an egg by steadying it with her forepaws and biting into it. Usually this steadying is performed by lifting the egg with paws several centimetres off the ground (Plate I, below), and gradually lowering it so that when the teeth penetrate the shell it is cupped between the pads of her paws, and the knuckles rest on the ground.

That insects are food may explain a peculiar reaction of which we publish two photographs. On both occasions on which she was first offered a new blanket of thick, rough, eri [Philosamia cynthia (Drury)] silk, she reacted as though she were afraid of it, withdrawal alternating with timid experimental bites dragging the blanket towards (Plate II, above) her, and then letting go to retreat from it (Plate II, below). The behaviour pattern resembled that exhibited by a dog to a mechanical toy, and may have a similar explanation. A dog in this context is interpreted as being frightened because the toy has movement like a living being, but is not alive. It is possible that this raw silk even after spinning, weaving and some laundering still smelt significantly of insects, smells which certainly excite her, and for which, in captivity, she may be starved. Such a smell associated with a non-insect form might excite the fear reaction observed.

Prater (1965) states that civets are silent animals. Ours has produced no sound except a cat-like explosive spit when she fears she may be touched. This is often accompanied by a stamp. She hits the floor abruptly with one of her forepaws, thus making a sharp sound coincident with the vocalization and contributing to the effect.

On 23-v-66 it was noticed that her right lower canine was missing. While demonstrating this absence immediately afterwards, the left lower canine was seen to be leaning outwards in its socket, i.e., it too was working loose. On 24-v-66 both the empty sockets were seen, but on 27-v-66 she possessed two new lower canines already erupted sufficiently to show their characteristic shape, and for their crowns to extend above the level of the adjacent incisors and molars. No partial double row of teeth could be seen in the lower jaw, as can be seen in young cats when they are replacing their milk, or deciduous, dentition by their permanent dentition. Thus the milk canines were replaced by their permanent

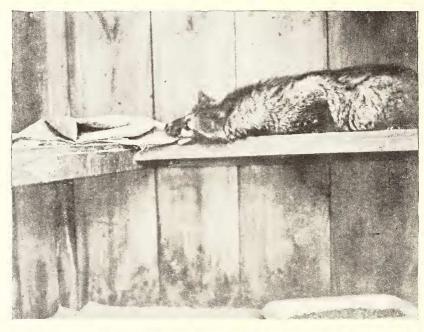
¹ Since making the first draft of this note we have seen our dog react similarly ambivalently to a somewhat naturalistic scarecrow in a turban and pyjamas. Until this we have always believed that scarecrows were ineffectual, being based on inaccurate suppositions about animal behaviour.





Above: ♀ born 1965—on 13-8-65 (Photo: J. C. Hoard) Below: ♀ born 1965—eating egg on 16-1-66 (Photo: S. D. Jayakar)

Jayakar: Common Palm Civet





Above: ♀ born 1965—15-1-66 timidly attacking a new silk blanket

Below: Two or three minutes later, apprehensively watching
the same blanket (in the top right hand corner of picture)
from a distance
(Photos: S. D. Jayakar)